# Relaxing the International Constraints on Full Employment

### 1 Introduction

Any two economists usually find it difficult to agree and, even when they do, their reasons are usually different. And yet, a large number of economists seems to have come round in recent years to the view that Keynesian demand management policies do not work under current conditions. There are those who believe that the reasons are basically domestic or internal to the economy, e.g. its proneness to inflation due to labour market conditions or a precarious national debt servicing burden which no longer permit large scale public borrowing. Then, there are others who believe that the reasons are international or external to the economy, caused by its 'openness'. They argue that flexible exchange rates with high mobility of international financial capital makes traditional fiscal expansion for combatting unemployment unsuitable in an open economy. The main aim of this paper is (a) to analyse the exact nature of this external constraint in a regime of flexible exchange rates with high mobility of financial capital and then, (b) to suggest a simple tax measure which largely seems to satisfy this constraint. Moreover, we argue that, (c) such a tax measure would also relax considerably the internal constraint in terms of the burden of servicing public debt and would improve the overall scope of public policy to combat unemployment.

## The nature of the external constraint

Paradoxically, although some economists agree that the external constraint is strictly binding on fiscal expansion, their reasons for doing so are almost diametrically opposite. The conventional argument made popular by the Mundell-Flemming model, deals with the ineffectiveness of fiscal policy in a world where free movement of financial capital keeps domestic interest in line with a given international rate. A vast amount of technical literature elaborating, modifying or critising particular properties of the model has been produced, but the basic argument can be put rather simply.1 A fiscal expansion increases effective demand, which puts upward pressure on the transaction demand for money. If monetary policy remains unaccommodating, this pushes the domestic interest rate upward beyond the internationally given rate (in a small open economy) to induce inflow of international financial capital. The capital inflow leads to the appreciation of the domestic currency to reduce export and increase import.2 As a result, aggregate effective demand is squeezed, largely neutralizing the original expansionary impulse of the fiscal policy. Indeed, in the extreme case, the appreciation of the domestic currency fully 'crowds out' the initial fiscal expansion to bring the domestic interest rate back to its international level.3

The essential point of the Mundell-Flemming argument about the ineffectiveness of fiscal policy is its theoretical prediction that the home currency would appreciate as a result of fiscal expansion, because the expansionary fiscal effect is neutralised by a reduction in the level of trade surplus due to currency appreciation. And it is on this very essential point that the Mundell-Flemming model can rightly be questioned even by those economists who would otherwise agree that fiscal policy is largely powerless in an open economy under current conditions. Most policymakers and economists in Europe today would presume that the home currency would tend to depreciate, as aggregate demand is stimulated through fiscal expansion (cf. Goodhart, 1987). Higher aggregate demand means higher import with little or no increase in export which worsens the balance of payments, putting downward pressure on the domestic currency. But what makes fiscal expansion a dangerous policy is the speculative capital flight that may be set in motion by (actual or expected) depreciation. Capital mobility under current conditions basically means that an increasing amount of speculative 'hot money' could fly away from the home currency, forcing it into a speculative spiral of uncontrollable depreciation, simply on the basis of news (or the expectation) of a fiscal expansion! This threat of massive capital flight makes fiscal policy not so much ineffective as unpredictably dangerous under current conditions of flexible exchange rates with high capital mobility. Thus, as mentioned in the beginning of this section, somewhat paradoxically, economists who believe that a fiscal expansion would be ineffective due to currency appreciation (such as in the Mundell-Flemming model), as well as those who fear spiralling currency depreciation due to massive capital means of fighting flights, may both perceive a binding external constraint on fiscal expansion as an appropriate unemployment. The high degree of capital mobility brought about by the integration of international capital markets underlies this paradoxically common view.

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It may be mentioned that recent experiences in the OECD countries suggest that both these views can have practical relevance depending on the particular circumstances, because the impact of fiscal expansion on the dynamics of the exchange rate tends to be far from uniform. Perhaps the closest corroboration of the Mundell-Flemming case insofar as the appreciation of the exchange rate is concerned is to be found in the experience of the United States in the first half of the 1980s (1981-85; cf. Dornbusch, 1986). Fiscal expansion in the form of a large budget deficit, coupled with a non-accommodating monetary policy since the shift in the stance of the Federal Reserve in 1979-80 to anti-inflation policies, kept the U.S. interest rate high and attracted international capital on a large enough scale to keep the dollar appreciating (Soros, 1987). But since the unemployment rate in the U.S. was also distinctly reduced, it can

<sup>&</sup>lt;sup>1</sup> Mundell (1961, 1963, 1964) and Flemming (1962) wrote their influential articles in the early 1960s. Their argument has been modified and examined by DORNBUSCH (1986, 1987), Gavin (1987), Goodharth (1987) and Tobin and De Mercado (1982).

<sup>&</sup>lt;sup>2</sup> Assuming that both export and import are sufficiently price-sensitive and that the Marshall-Lerner condition is satisfied.

<sup>3</sup> According to IS-LM mechanics, at any (internationally) given rate of interest, the rightward shift of the IS curve due to fiscal expansion raises interest rate and income. But the IS curve must ultimately move back to its original position through currency appreciation (i.e. complete 'crowding out'), leaving the interest rate unchanged from its initial position. However, see TOBIN and DE MERCADO (1982) for a perceptive Keynesian critique of its simple diagram form.

hardly be maintained that this appreciation of the exchange rate fully 'crowded out' the additional demand generated by the budget deficit in those years. However, this stands in sharp contrast to the experience and common perception of most other (smaller) OECD countries, where fiscal expansion is usually associated with a depreciation of the currency through a worsened trade balance (cf. Goodhart, 1987) and capital flights. The example of the abortive "social experiment" in fiscal expansion to combat unemployment in France in 1981-82 leading to a large current-account deficit and speculation against the franc comes to mind as a prime example (Sachs and Wyplosz, 1986).

However, even the U.S. experience during this period needs to be examined with greater caution, by distinguishing between the transitory or 'short-term' and the persistent or 'long-term' effect of currency appreciation brought about by capital inflow. The Mundell-Flemming type of analysis has a deceptively narrow focus on the short period, which hides the long-term consequences of currency appreciation as a result of fiscal expansion. Capital inflow induced by a higher interest rate which keeps a currency (e.g. U.S. dollar, 1981-85) appreciated despite fiscal expansion and a current-account deficit must lead to accumulated external indebtedness. This results in decreasing net-factor income on the current-account balance. The current account steadily deteriorates over the longer run and the longer the initial process of currency appreciation through capital inflow continues, the larger the devaluation to restore balance that will ultimately be required. This inherent longer-term problem is abundantly borne out by the time-paths of the broad aggregates in the U.S. balance of payments. From 1976 onwards, U.S. net merchandise export was in persistent deficit, but net investment income was sufficiently large to cover that merchandise deficit until about 1980-81. But after 1982, the net merchandise trade deficit was so large that it could no longer be covered by the dwindling net investment income (Appendix, Table 1) and recourse to international net capital inflow was needed on a large scale. As a result, the international investment (stock) position of the U.S. turned negative in 1985 and international net investment income (flow) also turned negative in 1987. With the U.S. turning increasingly from a net creditor to a net debtor in the world economy, its investment income can no longer provide support to its merchandise trade deficit and the dollar is vulnerable to an even larger devaluation in the longer run, if Relaxing the International Constraints on Full Employment

the current trend continues. The main lesson is evident: even if under exceptional circumstances fiscal expansion is associated with the appreciation of the home currency, this is a *transitory* phenomenon, because capital inflow which appreciates the currency temporarily would also exert, in the longer run, greater downward pressure on the same currency through a widening current-account deficit.

However, even this transitory phase of appreciation of the home currency due to fiscal expansion is unlikely to occur, especially in the context of the smaller European economies. For various reasons, their domestic financial assets are not perfect substitutes for international assets; nor does much evidence exist to suggest that expected returns should remain the same through arbitrage irrespective of the currency denomination of financial portfolios (*i.e.* the 'uncovered interest parity' condition; see Koromzay, Llewellyn and Potter, 1987; Schulmeister, 1987). Without these conditions being satisfied, there is little basis to a model (such as the Mundell-Flemming) which predicts appreciation of the home currency due to fiscal expansion and consequent 'crowding out' of aggregate demand through a reduction in trade surplus until interest rates across national borders are equalized.

As a 'normal' pattern in most European economies, one would expect that the stimulus to aggregate demand caused by fiscal expansion would lead partly to higher domestic activity and partly to negative pressure on the current account, which depreciates the home currency. But the extent of this depreciation is really the critical issue since, under current conditions, speculative capital flight from the country could set up an uncontrollable spiral of depreciation. In recent years this fear of massive capital flight that may be triggered

<sup>&</sup>quot;This view of the 'normal' pattern is also corroborated by several empirical studies in the OECD countries in the 1980s. Not only is it generally agreed that the relatively good performance of the U.S. economy in terms of employment is largely the result of a large government deficit, but cross-country econometric studies in OECD in the 1980s tend to single out government fiscal (and monetary) policy as probably the most important causal variable for explaining the unemployment rate (McCallum, 1986; Guger and Walterskirchen, 1988). In his study McCallum found that "...over the period 1977-84 differences in fiscal and monetary policy account for about 100% of the 3.3 percentage point increase in the gap between unemployment in Europe and in the United States" (p. 949); at the same time "...openness has a strong negative impact on the fiscal and monetary multipliers and a strong positive effect on the coefficients of the competitiveness and world unemployment variables" (p. 948).

by a fiscal expansion seems to have had a crippling effect on Keynesian demand management policies in several instances. 5

## 3. The rationale and outline of a tax proposal: "TOSTAB"

The high mobility of international financial capital does not simply reduce the effectiveness of fiscal measures; almost certainly, it also has long-term depressing effects on economic growth and on the climate for international trade. The transitory and short term speculative gyrations in the exchange rate have persistent effects with accumulating economic cost over the longer term. First, they mean loss of potential output and employment insofar as governments become over-cautious about fiscal expansion, even when Keynesian demand management could help. Second, they tend to misalign the domestic industrial structure of the country experiencing gyrations in its exchange rate. Any sustained appreciation of the currency over a period due to inflow of foreign capital may lead to the closing down of domestic firms in the face of foreign competition or their migrating abroad. But when this is followed by a period of depreciation (as in the case of the U.S.), it is not easy to restart those domestic firms. The 'quantity-adjustment' along the aggregate supply curve tends to be asymmetrical in this sense, leading to long-term misalignment of the industrial structure (cf. Dornbusch, 1987). Third, the lure of short-term capital gains may tend to create a bias towards financial portfolio investment and against real investment in physical assets. The time-horizon for investment tends to become shortened, discriminating typically against investments in physical capital which have longer 'pay-off' periods. If one needs to look for a case of 'adverse selection', in favour of 'speculative' rather than 'entrepreneurial' investment, one would do well to examine the consequences of such fluctuations in exchange rates (cf. Stiglitz and Weiss, 1981). It should also be mentioned that the resulting bias against investment in physical capital weakens the incorporation of technical progress and labour productivity growth which are perhaps the main sources of 'gains from trade' over time (cf. Pasinetti, 1981; 1988). Finally, it must not be forgotten that the exchange rate not only serves to determine the price of the stock of financial assets in another currency which is critically important for speculation but it also acts as a medium of transaction for the flow of international trade in goods and services. There is no reason to believe that unpredictable fluctuations in the exchange rate help to promote trade in goods and services, and some empirical evidence actually suggests that the professional traders and speculators in financial assets were the main gainers, whereas the traders in goods and services were the main losers as a result of exchange-rate speculations (Schulmeister, 1987). If this is the case in general, then even a greater degree of capital mobility through further deregulation may actually hinder the global trading system. The conventional wisdom that further financial deregulation will lead to expansion in trade seems questionable.

On the whole, the high mobility of financial capital in a flexible exchange-rate regime has not been beneficial to the working of the real economy either in the short or in the long run. By reducing the national autonomy to manage aggregate demand, high capital mobility has led to some increase in short-term unemployment which could have been avoided otherwise. And, in the longer-term, it has contributed to a slower and more volatile pattern of growth<sup>6</sup> by encouraging 'speculative' rather than 'entrepreneurial' investment which has further compounded the unemployment problem. Recent experience strongly points to the need to reduce the mobility of speculative capital, if the flexible exchange rate regime is to perform better in the future.

<sup>&</sup>lt;sup>5</sup> This is related to the fear of inflation which is often mentioned. Devaluation tends to upset the price-wage relation by tending to change the real wage rate and its consequent impact on effective demand (DIAZ ALEJANDRO, 1966; BHADURI and MARGLIN, 1988). In the case of 'real wage resistance', the depreciating domestic currency may increase the inflationary pressure by (i) making imported raw material more expensive, (ii) setting up a price-wage spiral as the 'traded' component of real wage is reduced and (iii) changing the level and structure of aggregate demand as real wage changes in the process.

<sup>&</sup>lt;sup>6</sup> At least one recent study by the United Nations (UNCTAD, World Trade and Development Report, 1988 pp. 38-40) estimates that between 1961 and 1972, the average annual real GDP growth rate in the 'developed market economies' (roughly OECD) was 4.9 percent with a coefficient of variation of annual growth rates of 18.2 percent. Between 1973 and 1985, the average annual growth rate decreased to 2.7 percent, while the coefficient of variation increased to 70.2 percent.

Several proposals are afloat, at least in academia, for reducing the speculative movements of international capital. Some of these proposals aim at better coordination among monetary authorities through sterilized or non-sterilized intervention 7 to narrow down the (target) zone of exchange-rate movements. Some other proposals for coordination have a more Keynesian flavour. Set in an international context, they emphasize simultaneous fiscal expansion for the major trade partners to reduce the strain on the balance of payments for individual countries undertaking fiscal expansion to fight unemployment.8 Although the effectiveness of monetary and fiscal policies is likely to increase through coordination, such 'first-best' solutions resulting from coordinated economic action are unlikely to materialize in the near future. Individual countries with their different political compulsions cannot be expected to easily subjugate their policies to the discipline of international coordination, even if it means improved economic management. Practical solutions, at least in the short run, should be 'second-best', or implementable by individual countries.

From this perspective, two similar proposals – the initial one by Tobin more than a decade ago (Tobin, 1978) and a more recent one by Dornbusch (1986; 1987; 1988) – deserve special attention. Both proposals intend to reduce speculative capital movement by direct intervention. Dornbusch argues for a dual-exchange system which differentiates between current- and capital-account transactions, while Tobin proposed the imposition of "an internationally uniform tax on all spot conversion of one currency into another, proportional to the size of the transactions" (Tobin, 1978, p. 155).

The dual-exchange proposal has the advantage of separating, at least roughly, trade-related transactions mostly on the current account from speculative transactions on the capital account. However, this advantage is gained only at a disproportionately large amount of administrative expense and red-tape. In contrast, Tobin's proposal,

which does not distinguish between trade- and speculation-related transactions, has an appealing administrative simplicity, especially in view of two facts: (a) trade-related flows are probably less than one-tenth of speculation-related flows in major international capital markets and, (b) large unpredictable fluctuations in the exchange rate probably affect world trade more adversely than the proposed tax on currency conversion would, as long as the latter remained a rather small percentage.

To alter Tobin's suggestion, the tax we recommend is a moderate (around 1/2 percent) uniform rate of Tax On Speculative Transaction Across the Border (TOSTAB). It modifies Tobin's original proposal in two important ways. First, it recognizes the need to reduce speculative movements of the same currency across national boundaries (e.g. movements in the DM accounts between the U.S. and Germany). This additional provision is needed especially to thwart large-scale capital flights which may occur even in anticipation of such a tax. Second, and more important, is the need to implement this tax unilaterally in some of the large surplus countries (i.e. Germany and/or Japan). The original Tobin proposal seemed to assume a prior international agreement (at least within the OECD) on the imposition of this tax, which, although desirable, seems distinctly impracticable at the present juncture. It will perhaps be a non-starter for a long time to come, if one has to wait for international cooperation, and there is a strong case for the persistent surplus countries to take the lead in the financial restructuring of the global system. Speculative capital movements against their currencies would tend to be less severe, given the fundamental strength in their currencies owing to a persistent trade surplus. And, even any temporary depreciation of their currency due to capital flight would set up strong self-correcting mechanisms through an even larger trade surplus. This built-in-stabilizer mechanism is available only to countries which are in powerful trading positions in the global system and where large international reserves and persistent trade surpluses allow them to play a leadership role by unilaterally imposing this tax.

<sup>&</sup>lt;sup>7</sup> When the monetary authority offsets changes in net foreign assets by compensating changes in domestic credit, the 'high powered' money base is held constant in a 'sterilized' intervention.

<sup>&</sup>lt;sup>a</sup> See Dreze, Wyplosz, Bean, Giavazzi and Giersch (1987) for some simulation

results on coordinated versus uncoordinated expansion.

<sup>9</sup> In this scheme each item on the current and on the capital accounts need to be treated in the light of its trade versus speculation-related potential. Dornbusch (1988), for example, agrees to leave interest income on the current account for his dual-exchange rate system. Nevertheless, one could as well argue that such income relates mainly to speculation.

## 4. Implications of TOSTAB for unemployment and economic management

The main advantage of TOSTAB may turn out to be its doubleedged nature. If it actually succeeded in deterring large volumes of speculative capital movement, the tax revenue would be relatively small, but the climate for production and trade would undergo distinct improvements. It may be recalled that current uncertainties regarding large-scale currency fluctuations have tended to adversely affect long-term investment in fixed capital, which reduces employment in the short run through the Keynesian 'multiplier', and makes the capital stock less productive in the longer run through a slower rate of obsolescence and scrapping. As a result, the pace of technological progress embodied in the capital stock slows down and labour productivity (along with creation of 'new' products) also increases at a slower rate reducing international competitiveness. 10 If TOSTAB succeeded in acting as a deterrent to speculative financial investments, it would help to improve the functioning of the real economy in terms of both employment and output.

However, even if TOSTAB failed to significantly reduce the volume of speculative capital movement, it would provide a welcome support to government tax revenue. In the absence of adequate statistical information on international speculative capital flows in Germany, it is not possible to make any reliable estimate.11 An estimate is also difficult because of the effects of potential tax evasion, brought about mostly by financial 'innovation'. Nevertheless, such a tax would undoubtedly increase the cost of speculating in financial

markets significantly.

If we assume that annual speculative capital flow is approximately 10 times that of commodity trade-related flows (i.e. value of export plus import), then a 1/2 percent tax works out to 5 percent of the value of export plus import. Taking current levels

10 It is relative rather than absolute labour productivity growth across countries which will be an important component in determining changes in international (price) competitiveness.

of commodity export and import in Germany, which were 568 and 440 billion DM respectively in 1988, this yields a tax revenue of 50 billion DM, compared with the total federal state tax revenue of approximately 222 billion with a budget deficit of 30 billion DM in 1988. Even if this tax revenue turns out to be grossly overestimated,12 there can hardly be any doubt that the revenue from TOSTAB will provide enormous support to the federal budget to fight unemployment without increasing public borrowing and the burden of servicing public debt. Both "supply-side" labor-market policies (e.g. the retraining of labour) as well as public investment programmes (e.g. to improve environment) can be expanded simultaneously from this additional tax revenue with positive impact on the current unemployment situation.

TOSTAB would also probably be counter-cyclical with lower inflationary potential, if government expenditure increases in a recession and decreases in a boom in the classic Keynesian manner. To the extent that increased government expenditure exerts downward pressure on the DM, it may induce some capital flight. But that would also tend to increase the tax revenue collected from TOSTAB, bringing the government's expenditure more in line with its revenue with relatively few repercussions on the interest rate and the public-

sector borrowing requirements (PSBR).

Finally, one fact deserves explicit mention. The European Monetary System (EMS) is gradually evolving towards a Deutsche Mark zone with the DM as the anchor of the system. The indisputable strength of the DM with its long-term trend towards appreciation, would make it increasingly difficult for other countries in the System to follow expansionary policies without unacceptably large depreciation in their currencies. It is in the interest of the entire System that Germany should be able to undertake expansionary fiscal policies to combat unemployment at home without speculative attacks on its currency and without the threat of inflation. A tax on speculative transaction across the border (TOSTAB) serves this common interest without sacrificing the national interest of Germany.

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<sup>11</sup> In Germany, information on capital transactions refers to such items as changes in credit, moneyholding of the public, direct foreign investment, etc. which reveal little about the daily speculative flows in the foreign-exchange markets.

<sup>&</sup>lt;sup>12</sup> See Table 2 in the Appendix which also provides a very rough estimate of non-speculative (total) transactions reported during 1988 in Germany. On the basis of the volume of non-speculative capital flow, the minimum estimate would be 12 to 15 billion DM, almost certainly an underestimate.

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#### APPENDIX

Table 1

## CURRENT ACCOUNTS, NET INCOME FROM CAPITAL EXPORT AND INTERNATIONAL INVESTMENT POSITION OF THE USA, 1979-1986 (in billions of US \$)

1979	1980	1981	1982	1983	1984	1985	1986
94.5	106.3	141.1	137.0	89.6	3.6	-111.9	-263.6
-27.5	-25.5	-28.0	-36.4	-67.1	-112.5	-112.1	-144.3
31.1	30.4	34.1	28.7	24.9	18.5	25.4	20.8
	94.5 -27.5	94.5 106.3 -27.5 -25.5	94.5 106.3 141.1 -27.5 -25.5 -28.0	94.5 106.3 141.1 137.0 -27.5 -25.5 -28.0 -36.4	94.5 106.3 141.1 137.0 89.6 -27.5 -25.5 -28.0 -36.4 -67.1	94.5 106.3 141.1 137.0 89.6 3.6 -27.5 -25.5 -28.0 -36.4 -67.1 -112.5	94.5 106.3 141.1 137.0 89.6 3.6 -111.9 -27.5 -25.5 -28.0 -36.4 -67.1 -112.5 -112.1

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

TABLE 2

## NON-SPECULATIVE TRANSACTIONS ACROSS THE BORDER IN THE FEDERAL REPUBLIC OF GERMANY IN 1988 (in billions of Deutsche Mark)

	568
1. Export, commodities	440
2. Import, commodities	152
3. Export, services	163
4. Import, services	54
5. Transfer from FRG	22
6. Transfer to FRG	96
7. Export of long-term capital	11
8. Import of long-term capital	86
9. Sum of export and import of short-term capital	
10. Total (sign ignored)	1592

Note: All figures were taken from Table 1 ("Important Items in the Balance of Payments"), 5a ("Long-Term Capital Transactions with Foreign Countries") and 6 ("Short-Term Capital Transactions with Foreign Countries") of "Statistische Beihefte zu den Monatsberichten der Deutschen Bundesbank, Reihe 3, Zahlungsbilanzstatistik, April 1989, Nr. 4. "Long-term" refers to more than 12 months. The total is the sum of all transactions irrespective of sign.